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ABSTRACT

A study was conducted to determine the status of the 706 students who graduated from Saginaw and Arthur Hill High Schools in Saginaw, Michigan, in June of 1986. A 13-item questionnaire was mailed to each student on November 21, 1986. Three additional contacts were attempted in an effort to reach nonresponding graduates. A total of 455 graduates returned usable responses. The questionnaire directed respondents to identify their educational and/or employment status, specify the perceived problems they encountered in the work force or in post-high school educational settings, and evaluate their high school experiences. The subjects' responses indicate that: (1) about 42 percent were enrolled in some type of full-time education; (2) 10.8 percent were unemployed; (3) employed graduates usually worked in unskilled positions; (4) business, engineering/architecture, and medicine/health services were the most frequently chosen higher education paths; and (5) 72.9 percent felt that they were following their educational plans. Other areas of interest include graduates' career plans, perceived helpfulness of specific high school courses and experiences, and perceived importance of various adult survival skills. These results should provide administrators, teachers, and counselors with assistance in instructional and curricular planning. Twwenty-one data tables are included. A copy of the questionnaire is appended along with seven other appendices. (TJH)

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EVALUATION REPORT

FOLLOW-UP STUDY OF 1986 GRADUATES

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Saginaw, Michigan

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FOLLOW-UP STUDY OF 1986 GRADUATES

An Approved Report of the

DIVISION OF ADMINISTRATION AND PERSONNEL

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May, 1987

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INTRODUCTION

In June, 1986, 706 students graduated from Saginaw and Arthur Hill High Schools. To determine what they have been doing since graduation the Department of Evaluation Services in conjunction with a committee of secondary counselors developed a thirteen item questionnaire (see Appendix A for a copy) which was mailed to each of them on November 21, 1986. Three additional contacts were attempted in an effort to reach non-responding graduates (see Appendix B for the timing and nature of these contacts). The questionnaire directed respondents to identify their educational and/or employment status, specify the perceived problems they encountered either in the work force or post high school education, and evaluate their high school experience. Those findings are contained in the balance of this report and represent the questionnaires received by March 18, 1987.

The results of this study provide administrators, teachers, and counselors with data to further assist them in instructional and curricular planning to meet the needs of Saginaw's students.

DEMOGRAPHIC DATA

The 1981 Follow-Up Survey was mailed to 706 graduates (445 at Arthur Hill and 261 at Saginaw High). Four hundred fifty-five questionnaires (64.4%) were returned. Of those 455, 311 (68.4%) were returned from Arthur Hill graduates and 144 (31.6%) from Saginaw High graduates. The response rate shows that 69.9% (311 of 445) of Arthur Hill's and 55.2% (144 of 261) of Saginaw High's graduates returned the survey.

Table 1 below contains a breakdown by ethnic background and sex of those returning the follow-up questionnaire and the district's 1986 graduating class.

TABLE 1. COMPARISON OF THE 1986 GRADUATE POPULATION WITH THE 1986 GRADUATES RETURNING A FOLLOW-UP QUESTIONNAIRE, BY ETHNIC BACKGROUND AND GENDER.

Ethnic Background and Gender	1986 Graduates Returning Follow-Up Questionnaires			Population of 1986 Graduating Class	
	Number	Percent of Respondents	Percent of Graduates	Number	Percent
TOTAL	455*	100.0	64.4	706	100.0
ETHNIC BACKGROUND					
White	226	49.8	75.1	301	42.6
Black	189	41.6	55.8	339	48.0
Spanish-American	23	5.1	56.1	41	5.8
American Indian	11	2.4	61.1	18	2.6
Oriental	5	1.1	71.4	7	1.0
GENDER					
Female	256	56.4	66.7	384	54.4
Male	198	43.6	61.5	322	45.6

*Gender and ethnic background data unavailable for one respondent; percentages are based on 454.

A review of the data shows that:

- Of the 454 respondents, 226 (49.8%) were White, 189 (41.6%) Black, 23 (5.1%) Spanish-American, 11 (2.4%) American Indian, and 5 (1.1%) Oriental. The percent of respondents by group approximates the percent each group represented in the graduating class.

- Ethnically speaking, over 50% of each group's graduates returned their questionnaire. A total of 75.1%, 71.4%, 61.1%, 56.1%, and 55.8% returned a questionnaire for White, Oriental, American Indian, Spanish-American, and Black ethnic groups, respectively. (Caution should be exercised when attaching significance to groups with comparatively small numbers.) (See Appendix B.)

- Of those responding, 256 (56.4%) were female and 198 (43.6%) were male. The graduating class was made of 384 (54.4%) females and 322 (45.6%) males. As can be seen the percent of males and females in each group was nearly proportional to the response rates.

The intent of the study was to describe the total 1986 Saginaw graduating class. The data presented should be viewed as representative of the survey respondents, and not necessarily reflective of the total graduating class since 64.4% of the graduates returned completed questionnaires. A second purpose of the study was to provide data upon which to make comparisons with the results of the Follow-Up Study of 1981 Graduates. Appendix B provides a comparison between the graduating classes and respondents in 1981 and 1986 by high school, gender, and ethnic background. Of the 1981 graduates 75.4% (603 of 800) returned the questionnaire compared with 64.4% (455 of 706) of the 1986 graduates.

The reader should also bear in mind that the 1981 study was conducted approximately six months after graduation. Thus, the 1981 and 1986 graduates are being compared at approximately the same points in their post-high school careers and thus some similarity may well be expected.

The 1986 graduate study collected more descriptive data of the graduates concerning both their course of study in high school and also a description of the type of auxiliary services these former students received during their K-12 school careers. In terms of course of study, most 1986 follow-up respondents were in a college preparatory program (42.3%) followed by general (32.7%), business or commercial (14.5%), vocational/technical (10.0%), and visual and performing arts (0.5%) programs of study. A complete breakdown by gender, ethnic background, and building can be found in Appendix B.

Approximately a quarter of the 1986 follow-up respondents (115 of 452: 25.4%) received one or more specialized auxiliary school services. The most frequently cited service was speech and language (12.6%) followed by teacher consultant (10.6%), social worker (7.7%), special education (6.2%), remedial math (5.1%), resource room (4.6%), remedial reading (4.4%), school psychologist (2.4%), and occupational/physical therapist (2.2%). A complete breakdown by gender, ethnic background, and building can be found in Appendix B.

The discussion section that follows will be divided into two major sections. The first section will deal with post-secondary education, employment, and plans for permanent residency. The other section will deal with reflections of the graduates back onto their high school career in terms of what helped them most and how school could have helped them more.

EMPLOYMENT, EDUCATION, AND RESIDENCY

PRIMARY ACTIVITY

The graduates were asked to indicate the primary activity which most accurately described their current employment/educational status.

Table 2 on the following page contains responses to this question by system, gender, ethnic background, and building.

A review of the data in Table 2 reveals:

- System-wide, the greatest percent of graduates (41.6%) was enrolled in a full-time training program, school or college.
  - --An almost identical percent of females (42.5%) and males (40.1%) were in school.
  - --The percent of White and Black graduates in school full-time was nearly the same (43.3% and 42.0%, respectively).
  - --A greater percentage of AHHS graduates (43.8%) than SHS graduates (36.8%) were in school full-time.
- The second most frequently mentioned activity was full-time[1] employment (15.7%).
  - --An equal percentage of females (15.7%) and males (15.7%) fell into this category.
  - --A greater percent of Spanish-Americans (26.1%) found full-time employment than Whites (22.8%), American Indians (18.2%), or Blacks (6.4%). No Oriental graduates were full-time employed.
  - --A much greater percentage of Arthur Hill graduates (20.1%) than Saginaw High (6.3%) were employed full-time.
- The third most frequently cited activity was part-time employment (14.6%).
  - --A greater percent of females (17.3%) than males (11.2%) fell into this category.

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[1] Thirty or more hours per week.

TABLE 2. MAJOR ACTIVITIES OF 1986 FOLLOW-UP RESPONDENTS BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

TYPE OF ACTIVITY	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Full-time education	41.6	42.5	40.1	45.4	43.3	13.0	42.0	60.0	43.8	43.9	43.3	36.8	40.0	31.5
Full-time employment	15.7	15.7	15.7	18.2	22.8	26.1	6.4	0.0	20.1	22.6	17.5	6.3	3.3	11.1
Part-time employment	14.6	17.3	11.2	0.0	11.6	21.7	18.1	20.0	12.3	15.9	8.4	19.4	20.0	18.5
Unemployed seeking work	10.8	9.4	12.7	18.2	6.7	8.7	15.4	20.0	7.5	5.5	9.8	18.1	16.7	20.4
Part-time education	8.0	8.7	7.1	0.0	7.1	17.4	8.5	0.0	7.8	7.3	8.4	8.3	11.1	3.7
Military	5.3	2.4	9.1	0.0	5.4	4.4	5.9	0.0	4.9	1.8	8.4	6.3	3.3	11.1
Unemployed not seeking work	2.4	2.4	2.6	18.2	0.9	8.7	2.7	0.0	1.6	1.2	2.1	4.1	4.5	3.7
Layed-off	0.9	0.4	1.5	0.0	1.8	0.0	0.0	0.0	1.3	0.6	2.1	0.0	0.0	0.0
Homemaker	0.7	1.2	0.0	0.0	0.4	0.0	1.0	0.0	0.7	1.2	0.0	0.7	1.1	0.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	452	254	197	11	224	23	188	5	308	164	143	144	90	54

--The greatest percentage of graduates part-time employed was Spanish-Americans (21.7%) followed by Orientals (20.0%), Blacks (18.1%), and Whites (11.6%). No American Indian graduates were part-time employees.

--A greater percentage of Saginaw High graduates (19.4%) than Arthur Hill (12.3%) were employed part-time.

- The fourth most frequently mentioned activity was "unemployed seeking work" (10.8%).

--A greater percentage of males (12.7%) than females (9.4%) fell into this category.

--The greatest percentage of graduates "seeking work" were Orientals (20.0%) followed by American Indians (18.2%), Blacks (15.4%), Spanish-Americans (8.7%), and Whites (6.7%).

--The percent of graduates at SHS (18.1%) was over two times the percent at AHHS (7.5%).

Each of the remaining major activities was mentioned by fewer than 10% of the respondents--part-time education (8.0%), military (5.3%), unemployed not seeking work (2.4%), layed-off (0.9%), and homemaker (0.7%).

A number of differences in primary activities can be observed between the 1986 and 1981 graduates. The chart below contains the percent of respondents for both years by primary activity.

Primary Activity	1986 %	1981 %
Full-Time Education	41.6	40.8
Full-Time Employment	15.7	11.6
Part-Time Employment	14.6	11.6
Unemployed Seeking Work	10.8	14.8
Part-Time Education	8.0	4.6
Military	5.3	7.6
Unemployed Not Seeking Work	2.4	1.3
Layed-Off	0.9	4.2
Homemaker	0.7	2.8
Other	0.0	0.7

Almost all the differences between the 1986 and 1981 graduates seem explainable if one remembers the generally depressed economic conditions

during the Fall of 1981 and into the Winter of 1982. When the economy has slowed for sometime (as in 1982), then full- and part-time education and full- and part-time employment are also depressed because of the economic inputs needed for both. Increases in primary activities like military enlistments, being a homemaker, layed-off, and being unemployed but seeking work are very realistic given the lack of employment opportunities generally. Thus the 1981 graduate was more likely to be unemployed, layed-off, marginally employed, or in the military than the 1986 graduates who were more likely to be either employed or seeking an education on a part- or full-time basis.

EMPLOYMENT

The 232 graduates who indicated "working" as their primary activity since graduation were asked to specify their job. These jobs were then classified by occupational category (see Appendix C for complete list).

A complete tabulation of occupational categories of the 1986 graduates by system, gender, ethnic background, and building is contained in Table 3 on the following page.

Highlights from Table 3[2] include:

- Two of these occupational categories, waiting on customers and manual work represented almost half (29.8% and 18.8% respectively) of the respondents.
- By system, there are marked differences (at least twice as many) between the percentage of males and females working in twelve of the seventeen occupational categories represented. Occupations showing smaller differences included:

  --More females (35.2%) than males (20.6%) were employed in jobs waiting on customers.

[2]Respondents did not indicate employment in one area. Therefore promotional activities are not shown in Table 3.

TABLE 3. OCCUPATIONAL CATEGORIES OF EMPLOYED 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

OCCUPATIONAL CATEGORY	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Waiting on customers	29.8	35.2	20.6	50.0	31.4	25.0	23.1	50.0	31.1	40.2	16.8	24.4	16.7	40.0
Manual work	18.8	9.9	32.6	0.0	19.0	12.5	18.5	50.0	17.4	7.1	32.5	24.4	20.0	33.3
Clerical work	16.6	27.5	0.0	0.0	9.2	12.5	36.9	0.0	12.1	20.5	0.0	35.6	53.3	0.0
Serving personal needs of people	11.5	10.6	13.0	0.0	13.7	12.5	7.7	0.0	13.2	11.6	15.6	4.5	6.7	0.0
Providing skilled services for people	5.1	3.5	7.6	0.0	5.9	0.0	4.6	0.0	5.2	4.5	6.5	4.5	0.0	13.3
Caring for people or animals	4.7	6.3	2.2	16.7	3.9	0.0	6.2	0.0	5.2	7.1	2.6	2.2	3.3	0.0
Craftsmanship	2.6	0.7	5.4	16.7	3.3	12.5	0.0	0.0	3.2	0.9	6.5	0.0	0.0	0.0
Artistic work	2.1	2.8	1.1	0.0	1.9	25.0	0.0	0.0	2.6	3.6	1.3	0.0	0.0	0.0
Skilled operation, repair, or installation of precision equipment	1.7	0.0	4.3	0.0	2.6	0.0	0.0	0.0	2.1	0.0	5.2	0.0	0.0	0.0
Machine work	1.3	0.0	3.3	0.0	1.9	0.0	0.0	0.0	1.5	0.0	3.9	0.0	0.0	0.0
Managerial work	1.3	1.4	1.1	0.0	1.9	0.0	0.0	0.0	1.5	1.8	1.3	0.0	0.0	0.0
Musical & entertainment activities	1.3	0.0	3.3	0.0	1.3	0.0	1.5	0.0	1.1	0.0	2.6	2.2	0.0	6.7
Number work	0.8	0.7	1.1	0.0	1.3	0.0	0.0	0.0	1.1	0.9	1.3	0.0	0.0	0.0
Selling & merchandising work	0.8	0.7	1.1	16.7	0.7	0.0	0.0	0.0	1.1	0.9	1.3	0.0	0.0	0.0
Not specified	0.8	0.0	2.2	0.0	1.3	0.0	0.0	0.0	1.1	0.0	2.6	0.0	0.0	0.0
Communications work	0.4	0.0	1.1	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	2.2	0.0	6.7
Inspecting & measuring	0.4	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.5	0.9	0.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.1*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	232	139	92	6	151	8	64	2	187	109	77	45	30	15

*Rounding error.

--More males (13.0%) than females (10.6%) had jobs serving personal needs of people.

--More females (1.4%) than males (1.1%) were in managerial jobs.

--In both number and selling/merchandising work, more males (1.1%) than females (0.7%) were employed.

- Only Whites (151) and Blacks (64) are represented by large enough numbers to make any meaningful statement by ethnic background.

  --The top three occupational categories for White graduates were:

    - Waiting on customers (31.4%)
    - Manual work (19.0%)
    - Serving the personal needs of people (13.7%)

  --The top three occupational categories for Black graduates were:

    - Clerical work (36.9%)
    - Waiting on customers (23.1%)
    - Manual work (18.5%)

- By school, differences between males and females are in the same direction except for those at SHS in the areas of "waiting on customers" and "serving personal needs of people".

- More Arthur Hill graduates (187) have been employed since June than Saginaw High graduates (45).

  --No Saginaw High graduates were employed in craftsmanship; artistic work; machine work; managerial work; number work; selling/merchandising; inspecting and measuring; and skill operation, repair, or installation of precision equipment.

  --No Arthur Hill graduates were employed in communication work.

Differences in occupations between the 1986 and 1981 graduates seem noteworthy. The chart below contains the percent of respondents for both years by occupational category.

Occupational Category	1986 %	1981 %
Waiting on customers	29.8	24.2
Manual work	18.8	21.6
Clerical work	16.6	5.9
Serving personal needs of people	11.5	11.8
Providing skilled services for people	5.1	11.8
Caring for people or animals	4.7	9.1
Craftsmanship	2.6	3.3
Artistic work	2.1	0.0
Skilled operation, repair, or installation of precision equipment	1.7	3.9
Machine work	1.3	5.9
Managerial work	1.3	2.0
Musical and entertainment activities	1.3	0.0
Number work	0.8	0.0
Selling and merchandising work	0.8	0.6
Not specified	0.8	0.0
Communications work	0.4	0.0
Inspecting and measuring	0.4	0.0
Promotional activities	0.0	0.6

The number of occupational categories represented by the 1981 (12 of 17) to 1986 (16 of 17) graduates has increased by four. The largest increase in a percentage of graduates employed in a category was 10.7% from 1981 to 1986 in "clerical work." Substantial increases between 1981 to 1986 were also observed in the following categories: waiting on customers (5.6%), artistic work (2.1%), and musical and entertainment activities (1.3%). Substantial decreases in percentages between 1981 to 1986 occurred in the following categories: providing skilled services for people (-6.7%); machine work (-4.6%); caring for people or animals (-4.4%); manual work (-2.8%); and skilled operation (-2.2%).

Respondents were asked to name where they worked. These organizations were then classified by industrial group (see Appendix D). Table 4 on the following page contains information by system, gender, ethnic background, and building for graduates employed in these industrial classifications.

TABLE 4. TYPE OF INDUSTRIES EMPLOYING 1986 GRADUATES AFTER HIGH SCHOOL GRADUATION BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

INDUSTRY OF EMPLOYERS	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Personal services	31.7	31.0	31.9	50.0	33.3	12.5	26.9	0.0	33.0	35.1	29.1	26.0	16.1	46.6
Professional & Related Services	24.6	31.0	14.9	0.0	16.0	37.5	46.3	0.0	19.1	24.6	11.4	47.8	54.8	33.3
Wholesale & Retail Trade	21.7	21.4	22.3	33.3	26.3	25.0	9.0	50.0	24.7	24.6	25.3	8.7	9.7	6.7
Manufacturing	5.8	3.4	9.6	0.0	6.3	12.5	4.4	0.0	5.7	1.8	11.4	6.5	9.7	0.0
Entertainment & Recreational Services	5.8	5.5	6.4	16.7	4.5	12.5	7.5	0.0	6.2	5.3	7.6	4.4	6.5	0.0
Construction	4.6	2.1	8.5	0.0	6.3	0.0	1.5	0.0	5.2	2.5	8.8	2.2	0.0	6.7
Transportation, Communication, and Other Public Utilities	2.5	1.4	4.3	0.0	4.0	0.0	0.0	50.0	3.1	1.8	5.1	0.0	0.0	0.0
Other	2.1	2.1	2.1	0.0	1.3	0.0	4.4	0.0	1.5	1.8	1.3	4.4	3.2	6.7
Finance, Insurance & Real Estate	1.2	2.1	0.0	0.0	2.0	0.0	0.0	0.0	1.5	2.5	0.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	237	142	94	6	154	8	66	2	191	111	79	46	31	15

A review of the data in Table 4 indicates that:

- Of the 237 employed graduates, 78% either worked in personal services, professional/related services, and wholesale/retail trade (31.7%, 24.6%, and 21.7% respectively).

- Differences by sex according to employer seem to be minor across all categories except for:

  --Professional and related services show more females (31.0%) than males (14.9%) being hired;

  --Manufacturing; construction; and transportation, communication and other public utilities show more males (9.6%, 8.5%, and 4.3% respectively) than females (3.4%, 2.1%, and 1.4% respectively); and

  --Finance, insurance, and real estate employers show only females (2.1%).

- Only White (154) and Black (66) graduates are represented by large enough numbers to make any meaningful statements by ethnic background.

  --The top three employers for White graduates were:

    - Personal services (33.3%),
    - Wholesale/retail trade (26.3%), and
    - Professional/related services (16.0%).

  --The top three employers for Black graduates were:

    - Professional/related services (46.3%),
    - Personal services (26.9%), and
    - Wholesale/retail trade (9.0%).

- More Arthur Hill graduates (191) were employed in the industries mentioned than Saginaw High graduates (46).

- No Saginaw High graduates were employed in the industries of transportation, communication and other public utilities or finance insurance, and real estate.

Some striking differences are apparent when comparing employer industries of 1986 and 1981 graduates. The chart below presents the employed 1986 and 1981 graduates by industrial employer.

Industry of Employer	1986 %	1981 %
Personal Services	31.7	3.8
Professional and Related Services	24.6	18.6
Wholesale and Retail Trade	21.7	60.3
Manufacturing	5.8	5.8
Entertainment and Recreation Services	5.8	1.9
Construction	4.6	5.1
Transportation, Communication, and Other Public Utilities	2.5	0.0
Other	2.1	1.3
Finance, Insurance, and Real Estate	1.2	3.2

The 1986 graduates found employment in nine of the nine industries. Saginaw's 1981 graduates were employed in eight of the nine industries with the exception being transportation, communication, and utilities. The most substantial decrease (-38.6%) appeared in wholesale and retail trade category from 60.3% in 1981 to 21.7% in 1986. The remaining single decrease was (-0.5%) in construction. The most substantial increase (27.9%) appeared in the personal services category from 3.8% in 1981 to 31.7% in 1986. The remaining increases were relatively small and spread among a number of employer categories.

The employed or layed-off 1986 graduates were also asked, "What was the single most serious occupational problem that they had met since graduation?" Those occupational problems faced by graduates are contained in Table 5 on the following page by system, gender, ethnic background, and building.

A review of the data contained in Table 5 reveals that:

- Of the 282 respondents 45.9% found no major occupational problems.
- System-wide totals show that the top three occupational problems were:

  --Unable to find the right job 17.3% (18.7%:AHHS and 13.4% SHS).

  --No work available 6.2% (4.3%:AHHS and 10.9%:SHS).

  --Lacked skills and technical knowledge 6.2% (6.7%:AHHS and 4.9%:SHS).

TABLE 5. MOST SERIOUS OCCUPATIONAL PROBLEMS OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

OCCUPATIONAL PROBLEM	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
No occupational problem	45.9	49.4	41.0	100.0	47.2	37.5	44.9	0.0	44.7	49.1	39.6	48.8	50.0	46.1
Unable to find the right job	17.3	17.4	17.1	0.0	16.8	25.0	16.8	50.0	18.7	19.8	17.6	13.4	12.5	15.3
No work available	6.2	8.1	3.4	0.0	3.1	6.3	10.3	50.0	4.3	5.2	3.3	10.9	14.3	3.9
Lacked skills and technical knowledge	6.2	8.4	8.6	0.0	7.5	12.5	3.7	0.0	6.7	6.0	7.7	4.9	1.8	11.5
Lacked job experience	5.9	5.2	6.9	0.0	6.2	6.3	5.6	0.0	6.3	5.2	7.7	4.9	5.3	3.9
Personal problems	4.5	4.7	4.3	0.0	3.1	6.2	6.5	0.0	4.3	4.3	4.4	4.9	5.3	3.9
Disappointed with occupational choice	3.1	2.3	4.3	0.0	3.7	0.0	2.8	0.0	2.9	1.7	4.4	3.7	3.6	3.9
Unable to follow plans to accomplish goals	3.4	2.3	5.2	0.0	3.7	0.0	3.7	0.0	3.9	2.6	5.4	2.4	1.8	3.9
Other	2.8	1.8	4.3	0.0	2.5	6.2	2.8	0.0	2.4	1.7	3.3	3.7	1.8	7.6
Prejudice and/or discrimination	1.4	0.6	1.7	0.0	1.3	0.0	1.0	0.0	1.9	0.9	2.2	0.0	0.0	0.0
Unable to establish goals	1.4	2.3	0.0	0.0	1.9	0.0	1.0	0.0	1.4	2.6	0.0	1.2	1.8	0.0
A combination of problems	0.7	1.2	0.0	0.0	0.6	0.0	0.9	0.0	0.5	0.9	0.0	1.2	1.8	0.0
Threat of lay-off	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
Being over qualified	0.3	0.6	0.8	0.0	0.6	0.0	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
Attending college full-time	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
Lack of funds for college	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	282	168	113	11	154	16	106	2	201	113	87	81	55	26

- The most frequent response of both females (49.4%) and males (41.0%) was "no serious occupational problem."

  --Almost equal percentage of females (17.4%) and males (17.1%) were unable to find the right job as the greatest occupational problem.

  --A greater percentage of females (8.1%) than males (3.4%) found "no work available" system-wide.

- Only Whites (154) and Blacks (106) are represented by large enough numbers to make any meaningful statement by ethnic background.

  --The top three occupational problems for White graduates were:

  - Unable to find the right job (16.8%),
  - Lacked skills and technical knowledge (7.5%), and
  - Lacked job experience (6.2%).

  --The top three occupational problems for Black graduates were:

  - Unable to find the right job (16.8%),
  - No work available (10.3), and
  - Personal problems (6.5%).

- The top three occupational problems for Arthur Hill female and male graduates were:

  --Females
  - Unable to find the right job (19.8%),
  - Lacked skills and technical knowledge (6.0%),
  - Lacked job experience (5.2%), and
  - No work available (5.2%).

  --Males
  - Unable to find the right job (17.6%),
  - Lacked skills and technical knowledge (7.7%), and
  - Lacked job experience (7.7%).

- The top three occupational problems for Saginaw High female and male graduates were:

  --Females
  - No work available (14.3%),
  - Unable to find the right job (12.5%),
  - Lacked job experience (5.3%), and
  - Personal problems (5.3%).

--Males
- Unable to find the right job (15.3%),
- Lacked skills and technical knowledge (11.5%), and
- Other (7.6%).

POST-HIGH SCHOOL EDUCATION

Table 6 on the following page contains data relevant to post high school educational information for 237 graduates. (See Appendix E for a complete list of school categories.)

A review of the data contained in Table 6 reveals that:

- Of the 237 graduates:

  --161 (67.9%) were Arthur Hill graduates, 76 (32.1%) Saginaw High graduates.

  --51.1% were enrolled in 4-year programs, 27.9% in 2-year programs.

- At least 73.6% of all respondents across all ethnic group categories were enrolled in a 4-year college/ university or 2-year junior/community college.

- Of 4-year and 2-year colleges attendance:

  --The percent of males (54.8%) in 4-year colleges/ universities exceeded females (50.3%).

  --The percent of females (28.7%) in 2-year colleges exceeded males (26.9%).

  --The percent of Arthur Hill graduates (52.7%) in 4-year colleges exceeded Saginaw High School graduates (51.4%).

  --The percent of Arthur Hill graduates (31.1%) in 2-year colleges exceeded Saginaw High School graduates (21.1%).

- The apprenticeship school was the third highest institution attended by:

  --Spanish-American and White graduates (25.0% and 5.1% respectively).

  --Saginaw High and Arthur Hill students (10.5% and 5.6% respectively).

TABLE 6. TYPES OF SCHOOLS ATTENDED BY 1986 GRADUATES AFTER HIGH SCHOOL GRADUATION BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

TYPE OF SCHOOL	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
College or University	51.1	50.3	54.8	80.0	52.7	25.0	55.0	25.0	52.7	47.2	59.2	51.4	55.4	41.0
Junior or Community College	27.9	28.7	26.9	20.0	34.0	50.0	18.6	50.0	31.1	34.8	26.8	21.1	18.5	27.3
Apprenticeship, Vocational-Technical School	8.0	7.7	6.4	0.0	5.1	25.0	8.8	0.0	5.6	5.6	5.6	10.5	11.1	9.1
Business School	5.5	8.4	1.1	0.0	2.5	0.0	9.8	0.0	4.4	7.9	0.0	7.9	9.3	4.5
Military School	2.5	0.7	5.4	0.0	2.5	0.0	2.0	0.0	2.5	0.0	5.6	2.6	1.9	4.5
Other	2.5	1.4	3.2	0.0	0.8	0.0	2.9	25.0	3.1	2.3	2.8	1.3	0.0	4.5
Adult Education	1.3	0.7	2.2	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	3.9	1.9	9.1
Skilled Personal Service School	0.8	1.4	0.0	0.0	0.8	0.0	1.0	0.0	0.6	1.1	0.0	1.3	1.9	0.0
Management Training	0.4	0.7	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	237	143	93	5	117	8	102	4	161	89	71	76	54	22

A review of the types of post secondary schools attended by 1986 and 1981 graduates revealed a large decrease in 2-year college attendance. The chart on the following page contrasts the percent of 1986 and 1981 graduates attending different types of schools.

Type of School	1986 %	1981 %
College or University	51.1	46.1
Junior or Community College	27.9	43.9
Apprenticeship, Vocational-Technical School	8.0	1.9
Business School	5.5	2.2
Military School	2.5	0.0
Other	2.5	0.4
Adult Education	1.3	0.0
Skilled Personal Service School	0.8	5.5
Management Training	0.4	0.0

The number of different types of schools attended by the 1986 (9 of 9) and 1981 (6 of 9) graduates has increased by three. The most substantial increases from 1981 to 1986 occurred in: apprenticeship, vocational-technical school (6.1%), college or university (5.0%), business school (3.3%), and military school (2.5%). The two decreases from 1981 to 1986 appeared in junior or community college (-16.0%), and skilled personal service school (-4.7%).

The chart on the following page contains the number and percent of graduates enrolled in post school education by institution.

Post Secondary School Attended	1986 Graduates #	%
Delta Community College	61	25.8
Michigan State University	27	11.4
Saginaw Valley State College	19	8.0
Averill Career Opportunities Center	13	5.5
Central Michigan University	11	4.7
Great Lakes Junior College	11	4.7
Ferris State College	10	4.2
Oakland University	8	3.4
Army/Navy/Air Force (Armed Services)	6	2.5
Western Michigan University	5	2.1
Baker Junior College	4	1.7
Knoxville College	3	1.3
A & T University, North Carolina	2	0.9
Aquinas College	2	0.9
Davenport College	2	0.9
Delaware State University	2	0.9
Eastern Michigan University	2	0.9
Florida A & M University	2	0.9
Michigan Technological University	2	0.9
Murphy Beauty School	2	0.9
Northwood Institute	2	0.9
University of Michigan	2	0.9
Alabama State University	1	0.4
Alma College	1	0.4
The American Musical & Dramatic Academy, New York	1	0.4
Associated Schools, Inc.	1	0.4
Ball State, Muncie Indiana	1	0.4
Bethune-Cookman College	1	0.4
Central State University of Ohio	1	0.4
General Motors Institute	1	0.4
Grambling University	1	0.4
Howard University	1	0.4
ITT Technical Institute	1	0.4
Johnson C. Smith University	1	0.4
Kendall School of Design	1	0.4
Lake Michigan University	1	0.4
Lake Superior State College	1	0.4
Lansing Community College	1	0.4
Louisiana Northwestern State University	1	0.4
McDonalds, Inc.	1	0.4
Norfolk State University	1	0.4
Northern Michigan University	1	0.4
Northwestern Michigan College	1	0.4
Purdue University	1	0.4
Rochester Institute of Technology	1	0.4
Ruben Daniels Lifelong Learning Center	1	0.4
Saginaw Valley Rehabilitation Center	1	0.4
Saginaw County Community Action Committee Youth Employment Center	1	0.4
Siena Heights College	1	0.4
Southern University	1	0.4
Tri-City SER	1	0.4
University of Florida	1	0.4
University of Wisconsin	1	0.4
Washington D.C. University	1	0.4
Wayne State University	1	0.4
Not Specified	6	2.5
	237	100.0

As can be seen the three most frequently cited educational institutions are in Michigan. These three schools represent 45.2% (107 of 237) of the 1986 graduates seeking further education.

These graduates were training for a variety of careers. Careers were categorized into one of twelve career emphases (see Appendix F). Table 7 on the following page contains career information by system, gender, ethnic background, and building.

Highlights from Table 7 include:

- System-wide, the most frequently mentioned careers were business (33.2%) and engineering/architecture (12.6%).
- Approximately 8% of all respondents were undecided in their career choices.
- There are marked differences system-wide between the percentage of males and females pursuing the following careers.

  --Female dominated
  - Business (42.0% females and 20.2% males) and
  - Education/social services (10.1% females and 3.8% males).

  --Male dominated
  - Engineering/architecture (24.0% males and 5.0% females),
  - Construction, industrial and skilled trades (8.9% males and 0.0% females), and
  - Commercial arts/communications (7.6% males and 3.4% females).

- Only Whites (109) and Blacks (73) are represented by large enough numbers to make any meaningful comparisons.

  --Top five career emphases by ethnic group follow.

  - Whites:
    Business (20.2%)
    Engineering/architecture (16.5%)
    Undecided (12.0%)
    Medicine/health services (11.9%)
    Education/social services (11.0%)

TABLE 7. POST-HIGH SCHOOL EDUCATIONAL CAREER EMPHASES OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

EDUCATIONAL CAREER EMPHASES	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Business	33.2	42.0	20.2	60.0	20.2	28.6	53.4	0.0	26.5	35.0	16.6	51.9	56.4	38.4
Engineering & Architecture	12.6	5.0	24.0	0.0	16.5	0.0	6.9	50.0	13.6	5.0	24.2	9.6	5.1	23.1
Medicine, Health Services	11.6	13.5	8.9	20.0	11.9	0.0	11.0	25.0	12.3	13.7	10.6	9.6	12.9	0.0
Law & Government	8.5	8.4	7.6	0.0	5.5	14.3	12.3	0.0	9.5	10.0	7.6	5.7	5.1	7.7
Undecided	8.5	8.4	8.9	0.0	12.0	14.3	4.1	0.0	8.8	10.0	7.6	7.7	5.1	15.4
Education & Social Services	7.5	10.1	3.8	0.0	11.0	0.0	4.1	0.0	9.5	13.7	4.6	1.9	2.6	0.0
Commercial Arts & Communications	5.0	3.4	7.6	0.0	5.5	28.5	2.7	0.0	5.4	3.8	7.6	3.9	2.6	7.7
Fine Arts & Letters	4.0	4.2	3.8	20.0	4.6	14.3	1.4	0.0	4.1	3.8	4.6	3.9	5.1	0.0
Science & Agriculture	4.0	4.2	3.8	0.0	5.5	0.0	2.7	0.0	4.1	3.8	4.6	3.9	5.1	0.0
Construction, Industrial & Skilled Trade	3.5	0.0	8.9	0.0	4.6	0.0	1.4	25.0	4.1	0.0	9.0	1.9	0.0	7.7
Services (food mgmt., cosmetology)	1.0	0.8	1.3	0.0	1.8	0.0	0.0	0.0	1.4	1.2	1.5	0.0	0.0	0.0
Transportation	0.5	0.0	1.3	0.0	0.9	0.0	0.0	0.0	0.7	0.0	1.5	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.1*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	199	119	79	5	109	7	73	4	147	80	66	52	39	13

*Rounding error.

- Blacks:
  Business (53.4%)
  Law/government (12.3%)
  Medicine/health services (11.0%)
  Engineering/architecture (6.9%)
  Education/social services (4.1%)
  Undecided (4.1%)

- School totals show the top three career choices to be as follows.

--Arthur Hill
- Business (26.5%)
- Engineering/architecture (13.6%)
- Medicine/health services (12.3%)

--Saginaw High
- Business (51.9%)
- Medicine/health services (9.6%)
- Engineering/architecture (9.6%)

Differences in careers pursued by graduates between 1986 and 1981 seem worthy of note. The chart below portrays the percent of respondents for both years by career emphasis.

Educational Career Emphasis	1986 %	1981 %
Business	33.2	29.1
Engineering and Architecture	12.6	12.1
Medicine, Health Services	11.6	12.5
Law and Government	8.5	6.3
Education and Social Services	7.5	2.9
Commercial Arts and Communications	5.0	0.7
Fine Arts and Letters	4.0	6.3
Science and Agriculture	4.0	5.1
Construction, Industrial & Skilled Trade	3.5	1.5
Services (food management, cosmetology	1.0	5.5
Transportation	0.5	1.8
Undecided	8.5	16.2

The two largest decreases from 1981 to 1986 occur in undecided (-7.7%) and services (-4.5%). Moderate increases can be observed in education/social services (4.6%), commercial arts/communications (4.3%), and business (4.1%).

TABLE 8. MOST SERIOUS EDUCATIONAL PROBLEMS OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

EDUCATIONAL PROBLEM	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
No educational problem	46.5	43.5	51.2	33.3	44.2	46.2	51.6	20.0	44.5	41.1	49.0	51.9	48.3	60.8
Money problems	26.6	29.9	22.0	16.7	27.3	7.7	28.7	20.0	26.1	30.8	21.0	27.7	28.4	26.0
Lacked basic educational skills	6.4	4.5	9.0	0.0	5.8	30.7	3.3	40.0	7.3	5.1	10.0	3.6	3.3	4.4
Unable to establish goals	4.7	5.1	4.1	16.7	5.2	7.7	3.3	0.0	4.6	5.1	4.0	4.8	5.0	4.4
Unable to follow plans to accomplish goals	4.7	3.9	5.7	16.7	5.8	0.0	3.3	0.0	4.6	3.4	6.0	4.8	5.0	4.4
Lack of study habits	4.3	0.6	2.4	0.0	1.9	0.0	0.8	0.0	1.8	0.9	3.0	0.0	0.0	0.0
Personal problems	4.0	5.1	1.6	0.0	3.3	0.0	4.9	0.0	3.6	4.2	2.0	4.8	6.7	0.0
Disappointed with choice of school or educational program	2.3	3.4	0.8	0.0	1.9	0.0	3.3	0.0	2.3	3.4	1.0	2.4	3.3	0.0
Other	2.3	3.4	0.8	16.7	3.9	0.0	0.0	0.0	3.2	5.1	1.0	0.0	0.0	0.0
Lack of higher math skills	0.3	0.0	0.8	0.0	0.7	0.0	0.0	0.0	0.5	0.0	1.0	0.0	0.0	0.0
Lack of motivation	0.3	0.0	0.8	0.0	0.0	0.0	0.0	20.0	0.5	0.0	1.0	0.0	0.0	0.0
Time	0.3	0.6	0.0	0.0	0.0	7.7	0.0	0.0	0.5	0.9	0.0	0.0	0.0	0.0
Prejudice and/or discrimination (e.g., sex, race, age, etc.)	0.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	0.5	0.0	1.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.1*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	299	123	176	6	153	13	121	5	216	116	99	83	60	23

*Rounding error.

The 1986 graduates, who pursued further education, were also asked, what the single most serious educational problem was they had met since graduation. Table 8 on the following page contains data regarding educational problems encountered by graduates in their post-secondary education.

A review of data contained in Table 8 reveals that:

- Almost half of the graduates (46.5%) faced no major educational problem.

- The three most often mentioned educational problems system-wide were:

  --Money problems (26.6%),
  --Lacked basic educational skills (6.4%),
  --Unable to establish goals (4.7%), and
  --Unable to follow plans to accomplish goals (4.7%).

  (These were also the most frequently cited problems at AHHS and SHS.)

- System-wide there are moderate differences in the problems encountered by females and males.

- Only Whites (153), Blacks (121), and Spanish-Americans (13) are represented by large enough numbers to make any meaningful statement by ethnic background.

  --Having no educational problems was more characteristic of Blacks (51.6%) than either Spanish-Americans (46.2%), or Whites (44.2%).

  --The top three named educational problems by ethnic group follow.

  - Whites
    Money problems (27.3%)
    Lacked basic educational skills (5.8%)
    Unable to follow plans to accomplish goals (5.8%)

  - Blacks
    Money problems (28.7%)
    Personal problems (4.9%)
    Lacked basic educational skills (3.3%)
    Unable to establish goals (3.3%)
    Unable to follow plans to accomplish goals (3.3%)
    Disappointed with choice of school or educational program (3.3%)

- Spanish-American
  Lacked basic educational skills (30.7%)
  Money problems (7.7%)
  Unable to establish goals (7.7%)
  Time (7.7%)

PLANS FOR OCCUPATION/CAREERS

The graduates were asked the extent to which their occupational or career plans made during high school changed during this school experience.

Table 9 below contains the responses to this question by system, gender, ethnic background, and building.

Highlights from Table 9 include:

- Of the 446 respondents, nearly three quarters had either a single plan or changed it once or twice during their high school experience (35.9% and 37.0% respectively).

  --Females were more likely to have a single plan than males (37.3% and 34.2% respectively).

  --Males were likely to change their plans once or twice than females (37.9% and 36.5% respectively).

- System-wide, approximately an equal percent of graduates were either unable to make career/occupational plans or changed them several times (13.2% or 13.9% respectively).

- Only Whites (221), Blacks (187), and Spanish-Americans (23) were represented by large enough numbers to make any meaningful statements by ethnic background.

  --Spanish-Americans were more likely to have a single plan than either Blacks or Whites (43.5%, 37.4%, and 34.4% respectively).

  --Blacks were more likely to have changed once or twice than either Whites or Spanish-Americans (42.8%, 33.5%, and 21.7% respectively).

- Arthur Hill graduates were more likely to have a single plan than Saginaw High graduates (36.1% and 35.4% respectively).

TABLE 9. STABILITY OF OCCUPATIONAL OR CAREER PLANS DURING HIGH SCHOOL OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

STABILITY OF CAREER PLANS DURING HIGH SCHOOL	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Single plan	35.9	37.3	34.2	44.4	34.4	43.5	37.4	0.0	36.1	42.5	36.0	35.4	38.8	29.6
Changed once or twice	37.0	36.5	37.9	33.4	33.5	21.7	42.8	60.0	35.1	33.1	36.0	41.0	40.0	42.6
Changed several times	13.9	12.9	14.7	11.1	14.0	17.4	13.4	0.0	14.2	18.1	17.0	13.2	15.6	9.3
Unable to make career plans	13.2	13.3	13.2	11.1	18.1	17.4	6.4	40.0	14.6	6.3	11.0	10.4	5.6	18.5
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	446	255	190	9	221	23	187	5	302	165	136	144	90	54

TABLE 10. MATCH OF EDUCATIONAL OR EMPLOYMENT PLANS MADE DURING HIGH SCHOOL WITH WHAT THE 1986 GRADUATE IS NOW DOING BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

MATCH OF EDUCATIONAL OR EMPLOYMENT PLANS	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Closely followed my plans	41.9	41.5	42.1	66.7	40.2	50.0	42.0	20.0	43.5	42.5	44.4	38.4	39.8	36.0
Generally followed my plans	31.0	31.5	30.6	11.1	32.7	50.0	27.9	40.0	32.3	33.1	31.6	28.3	28.4	28.0
Quite different from my plans	21.5	23.0	19.7	11.1	18.2	0.0	27.9	40.0	17.7	18.1	17.3	29.7	31.8	26.0
I lacked a plan	5.6	4.0	7.6	11.1	8.9	0.0	2.2	0.0	6.5	6.3	6.7	3.6	0.0	10.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	432	248	183	9	219	20	183	5	294	160	133	138	88	50

- Saginaw High graduates were more likely to have changed their career plans once or twice than Arthur Hill graduates (41.0% and 35.1% respectively).

The graduates were asked about the match of their educational or employment plans made during high school with what they are now doing. To this question, graduates could either respond closely followed, generally followed, quite different from their plan, or they lacked a plan.

Table 10 below contains the responses to the match of the graduates' plans to what they are now doing by system, gender, and ethnic background.

A review of the data in Table 10 indicates that:

- Of the 432 respondents, 72.9% had either "closely" or "generally" followed their plans (41.9% and 31.0% respectively).

  --A substantially large percentage of both gender groups were more likely to indicate their plans "closely" followed (42.1% males and 41.5% females) rather than "generally" followed (31.5% female and 30.6% males) what they were currently now doing.

  --This same response pattern can be seen both at AHHS and SHS.

- Only Whites (219), Blacks (183), and Spanish-Americans (20) were represented by large enough numbers to make any meaningful statement by ethnic group.

  --A greater percentage of Spanish-American graduates (50.0%) had a "close" match of their plans than either Blacks (42.0%) or Whites (40.2%).

  --Again, a greater percent of Spanish-American respondents (50.0%) had a "generally close" match of their plans than either Whites (32.7%) or Blacks (27.9%).

RESIDENCY

The graduates were also asked whether they planned to make their permanent home in Saginaw. If they planned to live elsewhere, the respondents were also asked why they wanted to live elsewhere.

Table 11 below contains the responses to the primary question by system, gender, ethnic background, and building.

Highlights of Table 11 include:

- Of the 446 respondents, 16.1% of the graduates plan to definitely make Saginaw their permanent home with almost half (48.2%) desiring to live somewhere other than Saginaw and a little over a third (35.7%) being uncertain about where they would permanently locate.

- This same general response pattern held for both gender groups, both schools, and both large ethnic groups (Whites and Blacks).

Table 12 below contains the responses of the 207 graduates who definitely planned to move from Saginaw and were willing to offer their reasons why they desired to live elsewhere.

A review of the data in Table 12 reveals:

- Of the 207 graduates who definitely do not plan to live in Saginaw, 50.5% will live elsewhere because of better job opportunities.

- Approximately 50% of all other major respondent group categories felt that job opportunities elsewhere was their primary motivation to live elsewhere (females 53.2%, males 46.7%, Whites 49.2%, Blacks 53.1%, AHHS 50.0%, and SHS 51.5%).

- Differences by sex according to reasons to live elsewhere seem to be minor across all categories except for:

  --Over three times as many males (13.0%) prefer to live elsewhere because of climate than females (3.5%).

TABLE 11. LOCATION OF PERMANENT HOME OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

LOCATION OF PERMANENT HOME		SYSTEM								ARTHUR HILL			SAGINAW HIGH		
			Gender		Ethnic Background						Gender			Gender	
		Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Other than Saginaw		48.2	52.4	42.4	50.0	46.8	30.4	52.4	20.0	48.5	51.2	44.5	47.9	54.5	37.0
Uncertain		35.7	32.3	40.3	50.0	35.5	47.8	32.6	80.0	35.9	32.9	39.4	35.4	31.1	42.6
Saginaw		16.1	15.3	17.3	0.0	17.7	21.8	15.0	0.0	15.6	15.9	16.1	16.7	14.4	20.4
TOTAL	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	N	446	254	191	10	220	23	187	5	301	164	137	144	90	54

--A substantially greater percent of female graduates (7.1%) prefer to relocate because of spouse or family than males (1.3%).

--A greater percent of females (4.3%) desire to live elsewhere because of the advantanges of a larger city than males (1.3%).

- Only White (101) and Black (93) graduates are represented by large enough numbers to make any meaningful statements by ethnic background.

  --The top three reasons to live elsewhere for White graduates were:

    - Better job opportunities elsewhere (49.2%),
    - Like climate elsewhere (11.0%), and
    - Desire not to live in Saginaw (7.3%).

  --The top three reasons to live elsewhere for Black graduates were:

    - Better job opportunities elsewhere (53.1%),
    - Schooling is elsewhere (11.4%), and
    - Desire a different environment (8.3%).

- Almost twice the percentage of Arthur Hill graduates (8.5%) gave the reason "like the climate elsewhere" than Saginaw High graduates (4.4%) as a reason for leaving Saginaw.

- Almost twice the percentage of SHS graduates (8.8%) will leave Saginaw due to a desire for a different environment than AHHS graduates (4.6%).

The next section deals with three questions that allowed the 1986 graduates to evaluate their high school educational experience in terms of how well it prepared them for the adult world. This section is an addition to the questions asked of the 1981 graduates so no comparisons back to this former study will be possible.

TABLE 12. REASONS WHY SOME 1986 RESPONDENTS ARE LEAVING THE SAGINAW AREA BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

REASONS FOR LEAVING	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Better job opportunities elsewhere	50.5	53.2	46.7	66.7	49.2	28.6	53.1	0.0	50.0	52.1	47.4	51.5	54.0	44.3
Desire not to live in Saginaw	8.2	7.8	7.8	16.6	7.3	14.3	7.3	0.0	7.9	7.6	6.8	8.8	8.0	11.1
Like climate elsewhere	7.3	3.5	13.0	0.0	11.0	28.6	2.1	0.0	8.5	4.4	15.2	4.4	4.0	5.6
Desire a different environment	5.9	6.4	5.2	0.0	3.6	14.3	8.3	0.0	4.6	5.4	3.4	8.8	8.0	11.1
Schooling is elsewhere	5.9	6.4	5.2	0.0	1.8	0.0	11.4	0.0	5.3	6.5	3.4	7.5	6.0	11.1
Relocate with my spouse/family	5.0	7.1	1.3	0.0	6.4	0.0	4.2	0.0	5.3	7.6	1.7	4.4	6.0	0.0
Will follow my occupation	4.5	4.3	5.2	16.6	3.6	14.3	4.2	0.0	5.3	5.4	5.1	2.9	2.0	5.6
Desire a larger city	3.2	4.3	1.3	0.0	2.7	0.0	4.2	0.0	2.6	4.4	0.0	4.4	4.0	5.6
Plan to enlist in the armed services	2.3	2.1	2.6	0.0	1.8	0.0	3.1	0.0	1.3	0.0	3.4	4.4	6.0	0.0
Better environment/social life elsewhere	1.4	0.7	2.6	0.0	2.7	0.0	0.0	0.0	1.9	1.1	3.4	0.0	0.0	0.0
Better standard of living elsewhere	1.4	0.7	2.6	0.0	2.7	0.0	0.0	0.0	1.9	1.1	3.4	0.0	0.0	0.0
Want to travel and see other places	1.4	1.4	1.3	0.0	0.9	0.0	2.1	0.0	0.7	1.1	0.0	2.9	2.0	5.6
Saginaw is an unfair city	0.9	0.7	1.3	0.0	1.8	0.0	0.0	0.0	1.3	1.1	1.7	0.0	0.0	0.0
Desire to move away from family/get away	0.9	0.7	1.3	0.0	1.8	0.0	0.0	0.0	1.3	1.1	1.7	0.0	0.0	0.0
Less crime and/or better neighborhoods elsewhere	0.4	0.0	1.3	0.0	0.9	0.0	0.0	0.0	0.7	0.0	1.7	0.0	0.0	0.0
Better school systems elsewhere	0.4	0.7	0.0	0.0	0.9	0.0	0.0	0.0	0.7	1.1	0.0	0.0	0.0	0.0
Too many minorities in Saginaw	0.4	0.0	1.3	0.0	0.9	0.0	0.0	0.0	0.7	0.0	1.7	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	99.9*	100.0	100.1*	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
N**	207	132	74	6	101	7	93	0	142	85	56	65	47	18

*Rounding error.

**This figure includes only the number of respondents who indicated an intention to leave the Saginaw area.

REFLECTIONS ON HIGH SCHOOL

This section deals with the reactions of the 1986 graduates to their high school experience. The responses of the graduates to issues relating to their public school education will provide insight into the perceived strengths and weaknesses of the high school curriculum.

The first question had the graduates rate on a 5 point scale (1 = very well to 5 = very poorly) how well the schools assisted them in gaining eleven skills/attitudes related to surviving in the adult world.

Table 13 below contains the average rating for each of the eleven survival skills broken down by system, gender, ethnic background, and building.

Highlights from Table 13 include:

- System-wide, the three survival skills the graduates found the schools providing the most assistance in were (the higher the number the better prepared):

  --Good manager of money, property, and resources (2.65),
  --Saleable work skills (2.43), and
  --Wise consumer (2.38).

- System-wide, the three survival skills the graduates rated the schools in providing the least assistance in were (the lower the number the worse the preparation):

  --Reading, writing, speaking, and listening (1.86),
  --A desire for learning, now and in the future (1.93), and
  --How to get along with others (1.97).

- Differences by gender seem to be minor across all adult survival skills except:

  --Being a good manager of money, property, and resources shows a higher level of development for males (2.71) than females (2.27), and

  --Development of skills in reading, writing, speaking, and listening shows a higher level of preparedness for males (1.99) than females (1.77).

TABLE 13. AVERAGE RATINGS* OF HOW WELL THE SAGINAW SCHOOLS ASSISTED 1986 GRADUATES ON ELEVEN ADULT SURVIVAL SKILLS BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

ADULT SURVIVAL SKILLS	AVERAGE RATINGS													
	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total N=443	Female N=253	Male N=189	Am In N=10	White N=219	Sp-Am N=23	Black N=186	Oriental N=3	Total N=299	Female N=163	Male N=135	Total N=143	Female N=89	Male N=54
To learn how to be a good manager of money, property, and resources	2.65	2.27	2.71	2.90	2.93	2.00	2.41	3.25	2.80	2.75	2.86	2.38	2.40	2.33
To gain saleable work skills	2.43	2.38	2.47	2.70	2.58	2.26	2.25	2.50	2.51	2.47	2.55	2.04	2.23	2.28
To learn how to be a wise consumer	2.38	2.34	2.43	2.60	2.58	2.13	2.16	3.00	2.52	2.47	2.59	2.08	2.11	2.04
To learn how to deal with a constantly changing environment	2.27	2.25	2.29	2.10	2.40	2.30	2.11	3.00	2.35	2.36	2.35	2.10	2.07	2.15
To develop a feeling of pride in work and in yourself	2.14	2.09	2.20	2.40	2.39	2.04	1.84	1.80	2.26	2.21	2.31	1.90	1.83	1.93
To learn how to compete with others	2.02	2.01	2.04	2.00	2.19	2.00	1.85	1.20	2.11	2.10	2.13	1.83	1.83	1.81
To learn how to examine and use information	2.02	1.98	2.14	2.30	2.10	2.04	1.91	2.00	2.09	2.05	2.14	1.88	1.71	2.15
To develop skills in mathematics	2.00	1.94	2.06	2.10	2.23	1.87	1.74	1.80	2.14	2.13	2.15	1.69	1.60	1.83
To learn how to get along with others	1.97	1.91	2.05	1.80	2.26	1.52	1.69	2.50	2.10	2.03	2.18	1.71	1.69	1.74
To develop a desire for learning, now and in the future	1.93	1.91	1.98	1.90	2.22	1.91	1.62	2.00	2.08	2.13	2.03	1.64	1.51	1.85
To develop skills in reading, writing, speaking and listening	1.86	1.77	1.99	1.80	2.11	1.61	1.61	1.80	1.98	1.93	2.04	1.60	1.44	1.87

*Ratings were on a scale from 1 = very good to 5 = very poorly.

- The skill of being a good manager of money, property, and resources was the highest rated skills by 4 of 5 respondent ethnic groups.

- The skills of reading, writing, speaking, and listening was the lowest rated set of skills by 4 of 5 respondent ethnic groups.

- Only White (219) and Black (186) graduates are represented by large enough numbers to make any meaningful statements by ethnic background. Differences by ethnic group seem minor except for the following skill:

  --A desire for learning, now and in the future shows a higher level of satisfaction for Whites (2.22) than Blacks (1.62).

- Arthur Hill graduates consistently rate their school's assistance higher (average of .38 of a scale point) than Saginaw High graduates across all skills except for:

  --The skill of how to examine and use information showed the closest agreement (2.09:AHHS and 1.88: SHS).

The 1986 graduates were also asked to identify the high school course which helped them the most to deal with adult responsibilities. Table 14 on the following page contains this information by system, gender, ethnic background, and building.

A review of the data in Table 14 indicates that:

- Of the 442 respondents, 15.4% found English to be the single most helpful course area.

- A total of 14% of all respondents found none of their courses most helpful.

- System-wide, the top four most helpful courses were:

  --English 15.4% (11.7%:AHHS and 22.9%:SHS),
  --A combination 12.4% (14.8%:AHHS and 7.6%:SHS),
  --Business 12.2% (14.4%:AHHS and 7.6%:SHS), and
  --Mathematics 10.4% (9.4%:AHHS and 12.5% SHS).

- Differences by gender as to the most helpful course area seem to be minor.

TABLE 14. COURSES CONSIDERED THE MOST HELPFUL BY 1986 FOLLOW-UP RESPONDENTS BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

MOST HELPFUL COURSE	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
English	15.4	18.1	12.2	11.1	10.1	0.0	23.7	25.0	11.7	12.2	11.2	22.9	27.8	14.7
None	14.0	14.2	13.8	0.0	20.2	8.7	8.6	0.0	14.4	14.6	14.2	13.2	13.4	13.0
A Combination**	12.4	14.2	10.1	11.1	10.6	4.4	13.9	50.0	14.8	15.9	13.4	7.6	11.1	1.9
Business/Commercial/ Economics/Computer Programming	12.2	14.2	9.6	22.2	11.5	21.7	11.8	0.0	14.4	18.3	9.7	7.6	6.7	9.3
Mathematics	10.4	8.7	12.8	11.1	9.6	13.0	11.3	0.0	9.4	7.3	12.1	12.5	11.1	14.7
Social Studies/Sociology/Psychology	9.0	8.7	8.5	22.2	6.9	13.0	9.7	0.0	6.4	5.5	7.5	13.2	14.4	11.1
Vocational/Technical	8.1	8.0	8.5	0.0	12.0	8.7	4.3	0.0	11.4	11.6	11.2	1.4	1.1	1.9
Home Economics	7.0	5.5	9.1	0.0	4.6	4.4	10.7	0.0	4.1	4.9	3.0	13.2	6.7	24.0
Science	4.3	3.2	5.9	22.2	5.1	4.4	2.2	25.0	5.4	3.7	7.5	2.1	2.2	1.9
Industrial Arts	2.7	1.2	4.8	0.0	3.7	17.4	0.0	0.0	3.0	1.2	5.2	2.1	1.1	3.7
Fine Arts	2.3	2.4	2.1	0.0	2.3	4.4	2.2	0.0	2.4	2.4	2.2	2.1	2.2	1.9
Physical Education	0.7	0.4	1.1	0.0	0.4	0.0	1.1	0.0	0.3	0.0	0.7	1.4	1.1	1.9
Foreign Language	0.5	0.4	0.5	0.0	0.9	0.0	0.0	0.0	0.7	0.6	0.7	0.0	0.0	0.0
Adult Living	0.2	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.7	1.1	0.0
Family Relations	0.2	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.6	0.0	0.0	0.0	0.0
High School Co-Op	0.2	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.0
Major Appliance Repair	0.2	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.0
Other	0.2	0.4	0.0	0.0	0.9	0.0	0.0	0.0	0.7	1.2	0.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.1*	99.9*	100.0	100.1*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	442	253	188	9	218	23	186	4	298	164	134	144	90	54

*Rounding error.

**See Appendix G for a breakdown of the most frequently occurring single course when multiple courses were offered as the most helpful course.

- Only White (218) and Black (186) graduates are represented by large enough numbers to make any meaningful statements by ethnic background.

  --The top three single most helpful course areas for White graduates were:

  - Vocational technical (12.0%),
  - Business (11.5%), and
  - English (10.1%).

  --The top three single most helpful course areas for Black graduates were:

  - English (23.7%),
  - Business (11.8%), and
  - Mathematics (11.3%).

  --A number of noteworthy differences exist between these two groups of graduates, they include:

  - A greater percentage of Blacks (23.7%) found English the single most helpful course than Whites (10.1%).

  - A greater percentage of White graduates (12.0%) found a vocational/technical course most helpful than Black graduates (4.3%).

  - A greater percent of Black graduates (10.7%) found home economics the most helpful course than White graduates (4.6%).

  - A greater percent of Whites (5.1%) found science most helpful than Blacks (2.2%).

  - A greater percentage of Whites (3.7%) found industrial arts most helpful than Blacks (0.0%).

- A number of noteworthy differences exist between AHHS and SHS graduates as to the single most helpful course area, they include:

  --Vocational/technical courses were mentioned over eight times as often by AHHS graduates (11.4%) than SHS graduates (1.4%).

  --Home economics was mentioned over three times as often by SHS graduates (13.2%) than AHHS graduates (4.1%).

  --Science was mentioned over two times as often by AHHS (5.4%) than SHS (2.1%).

--Social studies was mentioned over two times as often by SHS (13.2%) than AHHS (6.4%).

--English was mentioned approximately two times as often by SHS graduates (22.9%) than AHHS graduates (11.7%).

--Business was mentioned approximately two times as often by AHHS graduates (14.4%) than SHS graduates (7.6%).

A substantial percentage of the graduates (12.4% or 55 of 442) indicated that a combination of course areas were most helpful. The three top mentioned course areas in these combination responses were mathematics (33 times), English (29 times), and home economics (20 times). Appendix G contains a complete breakdown by system, gender, ethnic background, and school of these multiple responses. These responses were not combined with those graduates who responded with a single most helpful course because it was felt that those giving a combination of courses were not answering the same question.

The last question in this section asked the 1986 graduate to indicate how high school could have helped them more. The ways the school could have been more helpful are contained in Table 15 on the following page by system, gender, ethnic background, and building.

Highlights from Table 15 include:

- System-wide, the three most frequently mentioned ways school could have been more helpful were emphasize individual responsibility and self-direction (24.1%), stress creativity and independent thinking (19.7%), and offer more advanced courses (13.4%).

- Differences by gender to the ways school could have been more helpful seemed to be minor across all categories except for:

  --Emphasize individual responsibility and self-direction show more females (28.3%) than males (21.3%).

TABLE 15. WAYS IN WHICH THE HIGH SCHOOL COULD HAVE HELPED THE STUDENTS MORE ACCORDING TO THE 1986 FOLLOW-UP RESPONDENTS BY SYSTEM, ETHNIC BACKGROUND, AND SCHOOL.

WAYS SCHOOLS COULD HAVE BEEN MORE HELPFUL	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Emphasize individual responsibility and self direction	24.1	28.3	21.3	0.0	26.1	42.8	21.3	0.0	26.2	31.5	19.4	18.1	15.8	23.1
Stress creativity & independent thinking	19.7	19.4	15.5	28.6	10.8	7.1	20.4	20.0	19.1	18.0	20.4	21.7	28.0	7.7
Offer more advanced courses	13.4	12.2	16.3	14.3	10.2	14.3	17.1	40.0	12.0	8.3	16.4	18.1	21.0	11.6
Provide meaningful counseling	10.6	9.4	9.7	14.3	7.4	7.1	15.4	20.0	6.8	6.8	6.8	21.7	19.3	27.0
Stress academic excellence	8.8	7.2	11.4	0.0	19.9	7.1	6.8	0.0	10.5	9.7	11.7	3.6	1.8	7.7
None	7.5	9.4	5.7	14.3	6.8	14.3	6.8	20.0	8.0	9.7	5.8	6.0	7.0	3.8
Combination**	4.6	6.0	2.4	0.0	4.5	0.0	4.3	0.0	4.6	5.2	2.9	3.6	5.3	0.0
Offer more relevant curriculum	4.6	4.0	6.5	14.3	5.1	7.1	3.4	0.0	5.1	4.5	5.8	3.6	1.8	7.7
All of the above**	1.3	1.1	1.6	0.0	1.7	0.0	0.9	0.0	1.7	1.5	1.9	0.0	0.0	0.0
Provide better basic instruction	0.6	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.8	0.0	1.9	0.0	0.0	0.0
Obtain more competent teachers	0.6	0.5	0.8	0.0	1.1	0.0	0.0	0.0	0.8	0.8	1.0	0.0	0.0	0.0
Obtain teachers that take more time with students who are having problems	0.6	0.5	0.8	0.0	1.1	0.0	0.0	0.0	0.8	0.8	1.0	0.0	0.0	0.0
Offer preparation courses for ACT tests	0.3	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.0
Provide better teaching of vocational/ technical courses (COC)	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.0
Teach concepts not memorization	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.0
Teach effective study habits	0.3	0.0	0.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.2	0.0	3.8
Offer more help in finding financial aid for college	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.0
Offer accelerated basic and advanced courses	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.0
Establish stronger class rules	0.3	0.0	0.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.2	0.0	3.8
Provide more Black studies	0.3	0.0	0.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.2	0.0	3.8
Obtain more flexibility from teachers	0.3	0.5	0.0	0.0	0.0	0.0	0.9	0.0	0.4	0.8	0.0	0.0	0.0	0.0
Obtain classes which deal with the world today, not yesterday	0.3	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.0
Obtain more down to earth classes, like blueprint reading	0.3	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.0
Other	0.3	0.5	0.0	14.3	0.0	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.1*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	303	180	122	7	170	14	106	5	227	127	99	76	53	23

*Rounding error.

**See Appendix H for a breakdown of the most frequently occurring single way the high school could be more helpful when multiple ways were offered to this question.

--Offer advanced courses and stress academic excellence show more males (16.3% and 11.4% respectively) than females (12.2% and 7.2% respectively).

- Emphasize individual responsibility and self-direction was the most frequently mentioned means the schools could have used to help graduates from across the three largest ethnic groups.

- Only White (170) and Black (106) graduates are represented by large enough numbers to make any meaningful statements by ethnic background.

  --The top three ways the schools could have been more helpful for White and Black graduates were:

  - Emphasize individual responsibility and self-direction (26.1% and 21.3% respectively),
  - Stress creativity and independent thinking (10.8% and 20.4% respectively), and
  - Offer more advanced courses (10.2% and 17.1% respectively).

- More SHS graduates (21.7%) felt the schools should provide more meaningful counseling than AHHS graduates (6.8%).

- Substantially more AHHS graduates (10.5%) indicated the schools should stress academic excellence than SHS graduates (3.6%).

Some of the respondents (5.9%) to this question gave a combination of ways the schools could have been more helpful. Appendix H contains a complete breakdown by system, gender, ethnic background, and school of these multiple responses.

A FINAL WORD

The most significant results of the follow-up study of Saginaw's 1986 high school graduates have been presented. Data relevant to the graduates' employment post high school education, and perceptions of their problems as they entered employment or further schooling have been reviewed as well as a short evaluation of their high school courses and curriculum. Comparisons between the responses of 1981 graduates and the 1986 graduates have been made when possible.

From the survey data there emerged some important points to be highlighted. They include:

1. Of the 455 respondents:

   --Approximately forty-two percent (41.6%) of the respondents were enrolled in some kind of full-time education,
   --15.7% were employed full-time, and
   --14.6% were employed part-time.

2. Approximately six months after graduation 10.8% of the respondents were unemployed. The percent of unemployed SHS graduates (18.1%) was over twice that at AHHS (7.5%).

3. Most employed graduates (76.7%) were working in relatively unskilled jobs--waiting on customers, manual work, serving personal needs of people, and clerical.

4. Over half of the graduates (56.3%) were employed in industries classified as either personal (31.7%) or professional/related (24.6%) services.

5. The most common serious occupational problems encountered by graduates since graduation were:

   --Right job not available (17.3%),
   --No work available (6.2%), and
   --Lacked skills/technical knowledge (6.2%).

6. Almost eighty percent of the graduates (79.0%) who continued their education were attending either two or four year colleges or universities.

7. Of the 237 graduates (52.1% of the respondents who went on to some type of further education), 161 (67.9%) were from Arthur Hill, 76 (32.1%) from Saginaw High.

8. Business (33.2%), engineering/architecture (12.6%), and medicine/health services (11.6%) were the three most popular fields of study for these graduates.

9. The four most common educational problems encountered by graduates since graduation were:

   --Money problems (26.6%),
   --Lacked basic educational skills (6.4%),
   --Unable to establish goals (4.7%), and
   --Unable to follow plans to accomplish goals (4.7%).

10. Nearly three quarters of the graduates had either a single career plan or changed it once or twice during their high school experience (35.9% and 37.0% respectively).

11. Again, nearly three quarters of the respondents (72.9%) felt the match of their educational or employment plans made during high school either "closely" or "generally" followed what they are now doing (41.9% and 31.0% respectively).

12. Almost half of the graduates (48.2%) desire to live somewhere other than Saginaw with the remainder either definitely planning to make Saginaw their permanent home (16.1%) or uncertain about where they would permanently locate (35.7%).

13. The three adult survival skills most graduates feel most prepared to handle were:

   --Management of money, property, and resources,
   --Saleable work skills, and
   --Consumerism.

14. The top three single most helpful courses to graduates were:

   --English (15.4%),
   --Business (12.2%), and
   --Mathematics (10.4%).

15. The three most frequently mentioned ways the school could have been more helpful included:

--Emphasize individual responsibility and self-direction (24.1%),
--Stress creativity and independent thinking (19.7%), and
--Offer more advanced courses (13.4%).

APPENDICES

APPENDIX A

School District of the City of Saginaw

550 Millard Street
Saginaw, Michigan 48607
517-776-0200

Foster B. Gibbs, Ph.D., Superintendent

November 21, 1986

Dear 1986 Graduate:

Don't worry, we aren't selling encyclopedias or asking for a donation. All we want is a few minutes of your time to fill out a questionnaire about your experiences after high school.

You are not alone in this venture. The Department of Evaluation Services of the Saginaw Public Schools is sending this follow-up questionnaire to the entire 1986 graduating classes of Saginaw High and Arthur Hill High School. We are trying to learn about the class of 1986 and how former students feel about their high school education. This information will help us improve Saginaw's educational programs. Your individual responses will be kept confidential and will be summarized along with those of other Saginaw graduates.

Please complete the enclosed questionnaire and return it to us as soon as possible. We have even provided a pre-addressed, stamped envelope for your convenience. What could be easier?

Your cooperation is appreciated. Best of luck to you in the future.

Sincerely,

Foster B. Gibbs

Foster B. Gibbs, Ph.D.
Superintendent of Schools

FBG/gal

Enclosures

BOARD OF EDUCATION
Ruth A. Braun, President James W. Woolfolk, Vice-President Richard J. Stringer, Secretary James R. Kanary, Treasurer
Ruben Daniels, Trustee Willie E. Thompson, Trustee Hazel R. Wilson, Trustee

APPENDIX A

School District of the City of Saginaw, Michigan
Department of Evaluation Services
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A FOLLOW-UP STUDY OF 1986 GRADUATES

DIRECTIONS: For multiple-choice questions, read each question carefully and then circle the number to the left of the response that best describes your answer. For questions requiring a written response, read the question carefully and then print your answer on the line provided.

(1) Which one of the following categories best describes what you are doing now (major emphasis)?

1. Employed, full-time (30 or more hours per week)
2. Employed, part-time (less than 30 hours per week)
3. Layed-off
4. In a training program, school, or college—full-time
5. In a training program, school, or college—part-time
6. In the military service
7. Unemployed, seeking work
8. Unemployed, not seeking work
9. Homemaker
10. Other _____ (please specify)

(2) If you are presently employed or layed-off, what is the single most serious occupational problem that you have met since graduation? (Circle one)

1. Lacked skills and technical knowledge
2. Lacked job experience
3. Unable to find the right job
4. No work available
5. Prejudice and/or discrimination (e.g., sex, race, age, etc.)
6. Unable to establish goals
7. Unable to follow plans to accomplish goals
8. Disappointed with occupational choice
9. Personal problems
10. Other _____ (please specify)
11. No occupational problem

(3) If you have worked since high school, where? _____

What did you do? _____

(4) If presently in a training program, school or college, what is the single most serious educational problem that you have met since graduation? (Circle one)

1. Lacked basic educational skills
2. Money problems
3. Prejudice and/or discrimination (e.g., sex, race, age, etc.)
4. Unable to establish goals
5. Unable to follow plans to accomplish goals
6. Disappointed with choice of school or educational program
7. Personal problems
8. Other _____ (please specify)
9. No educational problem

(5) If presently in a training program, school or college, what is the name of your educational institution?

_____

What is your planned major course of study at the above named educational institution?

_____

(6) Which one of the following best describes the emphasis of your high school courses? (Circle one)

1. Business or commercial
2. College preparatory
3. General
4. Vocational or technical
5. Other (please specify) _____

(7) Did you receive services from any of the following: (Circle all that apply)

1. Speech and language teacher
2. School social worker
3. Remedial reading teacher
4. Occupational or physical therapist
5. Teacher consultant
6. School psychologist
7. Special education classroom teacher
8. Remedial math teacher
9. Resource room teacher
10. Other (please specify) _____
11. I did not receive services from any of the above.

(8) How well did school assist you in each of the following areas?

Very Well	Good	Undecided	Poor	Very Poorly	
1	2	3	4	5	(A) To develop a feeling of pride in work and in yourself
1	2	3	4	5	(B) To learn how to compete with others
1	2	3	4	5	(C) To gain saleable work skills
1	2	3	4	5	(D) To learn how to be a good manager of money, property, and resources
1	2	3	4	5	(E) To learn how to examine and use information
1	2	3	4	5	(F) To learn how to be a wise consumer
1	2	3	4	5	(G) To learn how to get along with others
1	2	3	4	5	(H) To develop skills in mathematics
1	2	3	4	5	(I) To develop a desire for learning, now and in the future
1	2	3	4	5	(J) To learn how to deal with a constantly changing environment
1	2	3	4	5	(K) To develop skills in reading, writing, speaking, and listening

APPENDIX A

(9) Which, if any, high school courses helped you the most to deal with adult responsibilities? (Circle one)

1. Business/Commercial
2. English
3. Fine Arts
4. Foreign Language
5. Home Economics
6. Industrial Arts
7. Mathematics
8. Physical Education
9. Science
10. Social Studies
11. Vocational-Technical
12. None
13. Other _____ (please specify)

(10) Which of the following best describes how high school could have helped you more? (Circle one)

1. Emphasize individual responsibility and self-direction
2. Stress academic excellence
3. Offer more advanced courses
4. Provide meaningful counseling
5. More relevant curriculum
6. Stress creativity and independent thinking
7. None
8. Other (please specify) _____

(11) Which of the following statements best describes your occupational or career plans during high school? (Circle one)

1. I was interested in a single career and stuck with my plans during high school
2. My career plans changed once or twice during the time I was in high school
3. My career plans changed several times during high school
4. I was unable to make career plans during high school

(12) Is what you are doing now in keeping with the educational or employment plans you made in high school? (Circle one)

1. Closely followed my plans
2. Generally followed my plans
3. Quite different from my plans
4. I lacked a plan

(13) Do you plan to make your permanent home in Saginaw? (Circle one)

1. No ... If no, why do you plan to live elsewhere? _____
2. Uncertain
3. Yes

Thank you for completing the questionnaire. Please return the questionnaire in the stamped, pre-addressed envelope.

In a couple of years we again maybe contacting you to further check out the progress you are making in your life. Please, if possible, keep in contact with your high school so we can reach you in the future.

Thank you again!

APPENDIX B

TABLE B.1. APPROXIMATE NUMBER AND PERCENT OF RESPONDENTS OBTAINED BY EACH MEANS OF CONTACT WITH THE 1986 GRADUATES.

Means of Contact	Date(s)	Returns	
		Number	Percent
First Mailing	November 21, 1986	143	31.4%
Second Mailing	December 12, 1986	129	28.4%
Phone Survey and Additional Mailing to New Addresses When Requested	December 22, 1986 thru January 13, 1987	144	31.6%
Third Mailing with Help from the Assistant Principals and Counselors at Both High Schools	During the week of January 19, 1987	39	8.6%
	TOTAL	455	100.0%

TABLE B.2. COMPARISON OF THE 1981 AND 1986 GRADUATES TO THE 1981 AND 1986 GRADUATES RETURNING A FOLLOW-UP QUESTIONNAIRE BY SCHOOL, RACE, AND GENDER.

Race & Sex	ARTHUR HILL				SAGINAW HIGH				SYSTEM			
	Graduates		Follow-Up Respondents		Graduates		Follow-Up Respondents		Graduates		Follow-Up Respondents	
	1981 # %	1986 # %	1981 # %	1986 # %	1981 # %	1986 # %	1981 # %	1986 # %	1981 # %	1986 # %	1981 # %	1986 # %
Black												
Male	20 (4.3)	35 (35.4)	18 (4.8)	15 (25.4)	133 (40.1)	100 (41.7)	88 (39.5)	46 (35.4)	153 (19.1)	135 (39.8)	106 (17.7)	61 (32.3)
Female	28 (6.0)	64 (64.6)	22 (5.9)	44 (74.6)	158 (47.6)	140 (58.3)	102 (45.7)	84 (64.6)	186 (23.3)	204 (60.2)	124 (20.7)	128 (67.7)
Total	48 (10.3)	99 (100.0)	40 (10.7)	59 (100.0)	291 (87.7)	240 (100.0)	190 (85.2)	130 (100.0)	339 (42.4)	339 (100.0)	230 (38.4)	189 (100.0)
Sp.-Am.												
Male	7 (1.5)	15 (44.1)	6 (1.6)	8 (42.1)	5 (1.5)	2 (28.6)	5 (2.2)	1 (25.0)	12 (1.5)	17 (41.5)	11 (1.8)	9 (39.1)
Female	16 (3.4)	19 (55.9)	11 (2.9)	11 (57.9)	7 (2.1)	5 (71.4)	7 (3.2)	3 (75.0)	23 (2.9)	24 (58.5)	18 (3.0)	14 (60.9)
Total	23 (4.9)	34 (100.0)	17 (4.5)	19 (100.0)	12 (3.6)	7 (100.0)	12 (5.4)	4 (100.0)	35 (4.4)	41 (100.0)	29 (4.8)	23 (100.0)
White												
Male	193 (41.2)	149 (51.2)	154 (41.0)	113 (51.8)	15 (4.5)	7 (70.0)	10 (4.5)	6 (75.0)	208 (26.0)	156 (51.8)	164 (27.4)	119 (52.7)
Female	192 (41.0)	142 (48.8)	158 (42.0)	105 (48.2)	9 (2.7)	3 (30.0)	6 (2.7)	2 (25.0)	201 (25.1)	145 (48.2)	164 (27.4)	107 (47.3)
Total	385 (82.2)	291 (100.0)	312 (83.0)	218 (100.0)	24 (7.2)	10 (100.0)	16 (7.2)	8 (100.0)	409 (51.1)	301 (100.0)	328 (54.8)	226 (100.0)
Am. In.												
Male	7 (1.5)	8 (57.1)	4 (1.0)	4 (44.4)	3 (0.9)	1 (33.3)	3 (1.3)	1 (50.0)	10 (1.3)	9 (50.0)	7 (1.2)	5 (45.5)
Female	3 (0.7)	6 (42.9)	2 (0.5)	5 (55.6)	2 (0.6)	3 (66.7)	2 (0.9)	1 (50.0)	5 (0.6)	9 (50.0)	4 (0.6)	6 (54.5)
Total	10 (2.2)	14 (100.0)	6 (1.5)	9 (100.0)	5 (1.5)	4 (100.0)	5 (2.2)	2 (100.0)	15 (1.9)	18 (100.0)	11 (1.8)	11 (100.0)
Oriental												
Male	2 (0.4)	5 (71.4)	1 (0.3)	4 (80.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.2)	5 (71.4)	1 (0.2)	4 (80.0)
Female	0 (0.0)	2 (28.6)	0 (0.0)	1 (20.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (28.6)	0 (0.0)	1 (20.0)
Total	2 (0.4)	7 (100.0)	1 (0.3)	5 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.2)	7 (100.0)	1 (0.2)	5 (100.0)
Grand Total												
Male	229 (48.9)	212 (47.6)	183 (48.7)	144 (46.5)	156 (47.0)	110 (42.1)	106 (47.5)	54 (37.5)	385 (48.1)	322 (45.6)	289 (48.2)	198 (43.6)
Female	239 (51.1)	233 (52.4)	193 (51.3)	166 (53.5)	176 (53.0)	151 (57.9)	117 (52.5)	90 (62.5)	415 (51.9)	384 (54.4)	310 (51.8)	256 (56.4)
Total	468 (100.0)	445 (100.0)	376 (100.0)	311* (100.0)	332 (100.0)	261 (100.0)	223 (100.0)	144 (100.0)	800 (100.0)	706 (100.0)	603** (100.0)	455* (100.0)

*Sex and race data unavailable for one (1) respondent.

**A total of 603 graduates responded to the questionnaire. School, gender, and race data unavailable for four (4) respondents.

TABLE B.3. HIGH SCHOOL COURSES OF STUDY EMPHASES OF 1986 GRADUATES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

COURSE OF STUDY	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total %	Female %	Male %	Am In %	White %	Sp-Am %	Black %	Oriental %	Total %	Female %	Male %	Total %	Female %	Male %
Business or commercial	14.5	18.5	9.2	11.1	14.6	21.7	14.1	0.0	15.0	20.0	9.0	13.6	15.7	9.8
College preparatory	42.3	44.1	40.0	44.5	42.2	30.5	43.5	60.0	41.7	40.0	44.0	43.6	51.7	29.4
General	32.7	29.5	36.8	33.3	30.3	26.1	36.4	20.0	30.0	28.5	31.3	38.6	31.5	51.0
Vocational/technical	10.0	7.5	13.5	11.1	11.9	21.7	6.0	20.0	12.7	10.9	14.9	4.2	1.1	9.8
Visual and performing arts	0.5	0.4	0.5	0.0	1.0	0.0	0.0	0.0	0.6	0.6	0.8	0.0	0.0	0.0
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	440	254	185	9	218	23	184	5	300	165	134	140	89	51

APPENDIX B

TABLE B.4. NUMBER AND PERCENT OF 1986 FOLLOW-UP RESPONDENTS RECEIVING SPECIALIZED AUXILIARY SERVICES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

SPECIALIZED AUXILIARY SERVICES	SYSTEM									ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender		
	Total	Female	Male	Am In	White	Sp-Am	Black	Oriental		Total	Female	Male	Total	Female	Male
	N=452	N=254	N=197	N=11	N=224	N=23	N=188	N=5		N=308	N=164	N=143	N=144	N=90	N=54
	# %	# %	# %	# %	# %	# %	# %	# %		# %	# %	# %	# %	# %	# %
Speech and language teacher	57 12.6	33 13.0	24 12.2	2 18.2	9 4.0	2 8.7	43 22.9	1 20.0		16 5.2	8 4.9	8 5.6	41 28.5	25 27.8	16 29.6
Teacher consultant	48 10.6	28 11.0	20 10.2	1 9.1	16 7.1	1 4.3	25 13.3	0 0.0		31 10.1	17 10.4	14 9.8	17 11.8	11 12.2	6 11.1
School social worker	35 7.7	9 3.5	26 13.2	3 27.3	10 4.5	4 17.4	18 9.6	0 0.0		19 6.2	5 3.0	1 0.7	16 11.1	4 4.4	12 22.2
Special education classroom teacher	28 6.2	6 2.4	22 11.2	2 18.2	12 5.4	2 8.7	11 5.9	1 20.0		20 6.5	6 3.7	14 9.8	8 5.6	0 0.0	8 14.8
Remedial math teacher	23 5.1	7 2.8	16 8.1	0 0.0	8 3.6	3 13.0	11 5.9	1 20.0		11 3.6	3 1.8	8 5.6	12 8.3	4 4.4	8 14.8
Resource room teacher	21 4.6	10 3.9	11 5.6	2 18.2	9 4.0	0 0.0	10 5.3	0 0.0		13 4.2	7 4.3	6 4.2	8 5.6	3 3.3	5 9.3
Remedial reading teacher	20 4.4	5 2.0	15 7.6	0 0.0	5 2.2	1 4.3	14 7.5	0 0.0		4 1.3	1 0.6	3 2.1	16 11.1	4 4.4	12 22.2
School psychologist	11 2.4	5 2.0	6 3.0	2 18.2	2 0.9	2 8.7	7 3.7	0 0.0		4 1.3	2 1.2	2 1.4	7 4.9	3 3.3	4 7.4
Occupational/physical therapist	10 2.2	3 1.2	7 3.6	0 0.0	3 1.3	0 0.0	6 3.2	1 20.0		3 1.0	1 0.6	2 1.4	7 4.9	2 2.2	5 9.3
Did not receive any of the above services	337 74.6	201 79.1	137 69.5	7 63.6	157 70.1	11 47.8	93 49.5	4 80.0		206 66.9	116 70.7	89 62.2	67 46.5	44 48.9	23 42.6

APPENDIX C

OCCUPATIONAL CATEGORIES USED IN SAGINAW'S 1981 AND 1986 FOLLOW-UP STUDIES

01. Caring for People or Animals, such as a nursing home, nursery, hospital, pet store, or animal laboratory.

02. Musical and Entertainment Activities, such as singing, composing, dancing, or dramatics.

03. Artistic Work, such as painting, sculpturing, flower arranging, photography, fashion designer, interior decorating.

04. Communications Work, as in radio or television announcing, journalism, news information reporting, interviewing, writing, editing or translating.

05. Promotional Activities, as in publicity work, recruiting, or advertising.

06. Number Work, as in accounting, computer programming, finance, and mathematics.

07. Inspecting and Measuring, as in sorting, measuring, and grading products; or checking equipment meters, public places, and surveying land.

08. Clerical Work, such as filing, typing, key punching, stenography, or keeping records.

09. Manual Work, as a construction laborer, manufacturing laborer, janitor, or furniture mover.

10. Machine Work, as in adjusting and operating machines used in the cutting or shaping of metal, cloth, etc. Includes driving tractor-trailor trucks and operating heavy equipment.

11. Craftsmanship, as found in the building trades, printing, watch repairing, welding, or tool and die making.

12. Skilled Operation, Repair, or Installation of Precision Equipment, includes television technicians, computer operator, auto mechanics; or furnace, air conditioner, and appliance repairman.

13. Serving Personal Needs of People, as a waiter, waitress, maid, doorman, messenger, laundry man, or gas station attendant.

14. Providing Skilled Services for People, as a restaurant or short order cook, beautician, barber, tailor, dressmaker, policeman, or stewardess.

(Continued)

APPENDIX C

15. Waiting on Customers, in stores, banks, motels, offices, or at home, helping telephone customers with business orders, and reservations; tour guides, ticket and toll collectors.

16. Selling and Merchandising Work, as a department store buyer, factory sales representative, or wholesaler. Includes the selling of manufactured and commercial products, services, insurance, and real estate.

17. Managerial Work, as a shop foreman, supervisor; owning or managing a small store or business.

APPENDIX D

MAJOR INDUSTRIAL GROUPS USED IN SAGINAW'S 1981 AND 1986 FOLLOW-UP STUDIES

1. Construction
2. Manufacturing
3. Transportation, communication and other public utilities
4. Wholesale and retail trade
5. Finance, insurance, and real estate
6. Entertainment and recreational services
7. Professional and related services (i.e., health services, schools, legal, engineering, etc.)
8. Personal services (i.e., barber, hotels, garment services, shoe repair, etc.)
9. Other

APPENDIX E

POST-HIGH SCHOOL CATEGORIES USED IN SAGINAW'S 1981 AND 1986 FOLLOW-UP STUDIES

01. Apprenticeship school, vocational-technical, and/or correspondence school
02. Management training program
03. Nursing school
04. Bible school
05. Business school
06. Adult education
07. Skilled personal service schools (such as barber, cosmetology, cooking, tailoring, etc.)
08. Junior or community college
09. College or university

APPENDIX F

EDUCATIONAL CAREER EMPHASIS CATEGORIES USED IN SAGINAW'S 1981 AND 1986 FOLLOW-UP STUDIES

01. Business: such as management, data processing, accounting, personnel management, banking.

02. Commercial Arts and Communication: such as photography, printing, graphic arts, illustrations, advertising, journalism, television industry, and radio broadcasting.

03. Construction, Industrial, and Skilled Trades: such as refrigeration, carpentry, sheet metal, plumber, machinist, and electrician.

04. Education and Social Services: such as clergy, counseling, recreation, teaching, and professional youth leadership.

05. Engineering and Architecture: such as construction management, drafting, mechanical drawing, engineering--electrical/civil/mechanical, and landscape architecture.

06. Fine Arts and Letters: such as music, English, painting, sculpture and dramatics.

07. Law and Government: such as law enforcement, lawyer, military science, and city management.

08. Medicine and Health Services: such as dentistry, hospital administration, medical services, nursing, pharmacy, psychiatry, and veterinary medicine.

09. Science and Agriculture: such as physics, mathematics, forestry, conservation, chemistry, zoology, poultry science, and horticulture.

10. Services: such as auto repair, food management, chef, cosmetology, home economist, mortician.

11. Transportation: such as aviation careers, airline stewardess, railroad careers, and drivers--truck and bus.

TABLE G.1. COURSES CONSIDERED THE MOST HELPFUL BY THE FIFTY-FIVE 1986 GRADUATES INDICATING A COMBINATION OF COURSES BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

MOST HELPFUL COURSE	SYSTEM									ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background							Gender			Gender	
	Total	Female	Male	Am In	White	Sp-Am	Black	Oriental		Total	Female	Male	Total	Female	Male
	N=55	N=35	N=19	N=1	N=23	N=1	N=27	N=2		N=44	N=25	N=18	N=11	N=10	N=1
	# %	# %	# %	# %	# %	# %	# %	# %		# %	# %	# %	# %	# %	# %
Mathematics	33 19.4	21 20.6	11 16.7	1 33.3	12 17.1	0 0.0	17 19.8	2 28.6		28 21.0	17 24.6	10 15.6	5 13.9	4 12.5	1 33.3
English	29 17.1	17 16.7	12 18.2	0 0.0	13 18.6	0 0.0	14 16.3	2 28.6		24 17.9	12 17.4	12 18.8	5 13.9	5 15.6	0 0.0
Home Economics	20 11.8	15 14.7	4 6.1	0 0.0	5 7.1	0 0.0	13 15.1	1 14.3		11 8.2	8 11.6	3 4.7	9 25.0	7 21.9	1 33.3
Business/Commercial/Economics/ Computer Programming	19 11.1	15 14.7	4 6.1	1 33.3	7 10.0	0 0.0	11 12.8	0 0.0		15 11.2	11 16.0	4 6.2	4 11.1	4 12.5	0 0.0
Science	17 10.0	9 8.8	8 12.1	1 33.3	9 12.9	1 50.0	5 5.8	1 14.3		14 10.4	5 7.2	9 14.1	3 8.3	3 9.4	0 0.0
Social Studies/Sociology/ Psychology	15 8.8	6 5.9	9 13.6	0 0.0	7 10.0	1 50.0	7 8.1	0 0.0		11 8.2	2 2.9	9 14.1	4 11.1	4 12.5	0 0.0
Vocational/Technical	12 7.1	7 6.9	5 7.6	0 0.0	6 8.6	0 0.0	5 5.8	1 14.3		10 7.5	6 8.7	4 6.2	2 5.6	1 3.1	1 33.3
Physical Education	7 4.1	3 2.9	4 6.1	0 0.0	3 4.3	0 0.0	4 4.7	0 0.0		7 5.2	3 4.3	4 6.2	0 0.0	0 0.0	0 0.0
Fine Arts	6 3.5	2 2.0	4 6.1	0 0.0	4 5.7	0 0.0	2 2.3	0 0.0		6 4.5	2 2.9	4 6.2	0 0.0	0 0.0	0 0.0
Foreign Language	6 3.5	3 2.9	3 4.5	0 0.0	2 2.9	0 0.0	4 4.7	0 0.0		5 3.7	2 2.9	3 4.7	1 2.8	1 3.1	0 0.0
Industrial Arts	3 1.8	1 1.0	2 3.0	0 0.0	2 2.9	0 0.0	1 1.2	0 0.0		3 2.2	1 1.5	2 3.1	0 0.0	0 0.0	0 0.0
Other	3 1.8	3 2.9	0 0.0	0 0.0	0 0.0	0 0.0	3 3.5	0 0.0		0 0.0	0 0.0	0 0.0	3 8.3	3 9.4	0 0.0
TOTAL %	100.0	100.0	100.1*	99.9*	100.1*	100.0	100.1*	100.1*		100.0	100.0	99.9*	100.0	100.0	99.9*
N	170	102	66	3	70	2	86	7		134	69	64	36	32	3

*Rounding error.

TABLE H.1. WAYS IN WHICH THE HIGH SCHOOL COULD HAVE HELPED THE STUDENTS MORE ACCORDING TO THE SEVENTEEN 1986 GRADUATES INDICATING A COMBINATION OF WAYS BY SYSTEM, GENDER, ETHNIC BACKGROUND, AND SCHOOL.

WAYS SCHOOLS COULD HAVE BEEN MORE HELPFUL	SYSTEM								ARTHUR HILL			SAGINAW HIGH		
		Gender		Ethnic Background						Gender			Gender	
	Total	Female	Male	An In	White	Sp-An	Black	Oriental	Total	Female	Male	Total	Female	Male
	N=17 # %	N=12 # %	N=5 # %	N=0 # %	N=11 # %	N=0 # %	N=6 # %	N=0 # %	N=14 # %	N=9 # %	N=5 # %	N=3 # %	N=3 # %	N=0 # %
Emphasize individual responsibility & self-direction	13 19.1	10 21.3	3 14.3	0 0.0	8 18.2	0 0.0	5 20.8	0 0.0	11 19.3	8 22.2	3 14.3	2 18.2	2 18.2	0 0.0
Stress academic excellence	12 17.6	7 15.0	5 23.8	0 0.0	10 22.7	0 0.0	2 8.3	0 0.0	12 21.1	7 19.4	5 23.8	0 0.0	0 0.0	0 0.0
Offer more advanced courses	8 11.8	5 10.6	3 14.3	0 0.0	4 9.1	0 0.0	4 16.7	0 0.0	6 10.5	3 8.3	3 14.3	2 18.2	2 18.2	0 0.0
Provide meaningful counseling	12 17.6	8 17.0	4 19.0	0 0.0	8 18.2	0 0.0	4 16.7	0 0.0	9 15.8	5 13.9	4 19.0	3 27.3	3 27.3	0 0.0
More relevant curriculum	8 11.8	5 10.6	3 14.3	0 0.0	5 11.4	0 0.0	3 12.5	0 0.0	7 12.3	4 11.1	3 14.3	1 9.1	1 9.1	0 0.0
Stress creativity of independent thinking	15 22.1	12 25.5	3 14.3	0 0.0	9 20.5	0 0.0	6 25.0	0 0.0	12 21.1	9 25.0	3 14.3	3 27.3	3 27.3	0 0.0
TOTAL %	100.0	100.0	100.0	0.0	100.1*	0.0	100.0	0.0	100.1*	99.9*	100.0	100.1*	100.1*	0.0
N	68	47	21	0	44	0	24	0	57	36	21	11	11	0

*Rounding error.